

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Ke-Wen DONG, et al

Title: RECOMBINANT BIOLOGICALLY ACTIVE HUMAN ZONE
PELLUCIDA PROTEINS 3 (HZP3) TO TEST MAIL
FERTILITY

Appl. No.: 09/252,828

Filing Date: 02/19/1999

Examiner: Lisa COOK

Art Unit: 1641

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INFORMATION DISCLOSURE STATEMENT
UNDER 37 CFR §1.56Commissioner for Patents
Box PATENT APPLICATION
Washington, D.C. 20231

Sir:

Submitted herewith on Form PTO/SB/08 is a listing of documents known to Applicants in order to comply with Applicants' duty of disclosure pursuant to 37 CFR §1.56. A copy of each listed document is being submitted to comply with the provisions of 37 CFR §1.97 and §1.98.

The submission of any document herewith, which is not a statutory bar, is not intended as an admission that such document constitutes prior art against the claims of the present application or that such document is considered material to patentability as defined in 37 CFR §1.56(b). Applicants do not waive any rights to take any action which would be appropriate to antedate or otherwise remove as a competent reference any document which is determined to be a *prima facie* art reference against the claims of the present application.

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TIMING OF THE DISCLOSURE

The listed documents are being submitted in compliance with 37 CFR §1.97(c), before the mailing date of either a final action under 37 CFR §1.113, a notice of allowance under 37 CFR §1.113, or an action that otherwise closes prosecution in the application.

RELEVANCE OF EACH DOCUMENT

All of the documents are in English.

Applicants respectfully request that any listed document be considered by the Examiner and be made of record in the present application and that an initialed copy of Form PTO/SB/08 be returned in accordance with MPEP §609.

FEE

The Commissioner is hereby authorized to charge the fee in connection with submission of an information disclosure statement under 37 CFR §1.97(c) in the amount of \$180.00 in accordance with 37 CFR §1.17(p), including any additional fees which may be required regarding this application under 37 CFR §§ 1.16-1.17, or credit any overpayment, to Deposit Account No. 19-0741. Should no proper payment be

enclosed herewith, as by a check being in the wrong amount, unsigned, post-dated, otherwise improper or informal or even entirely missing, the Commissioner is authorized to charge the unpaid amount to Deposit Account No. 19-0741.

Respectfully submitted,

Date March 27, 2003

By 

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Substitute for form 1449B/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT Date Submitted: March 27, 2003 (use as many sheets as necessary)		Complete if Known	
		Application Number	09/252,828
		Filing Date	02/19/1999
		First Named Inventor	Ke-Wen DONG
		Group Art Unit	1641
		Examiner Name	Lisa COOK
		Attorney Docket Number	024754-0114

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Sheet	1	of	2
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U.S. PATENT DOCUMENTS						
Examiner Initials*	Cite No. ¹	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code ² (if known)			
	A1	4,554,101		T. P. Hopp	11-19-1985	
	A2	5,272,071		S.C. Chappel	12-21-1993	
	A3	5,641,670		D. A. Treco et al.	06-24-1997	

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FOREIGN PATENT DOCUMENTS									TECH CENTER 160
Examiner Initials*	Cite No. ¹	Foreign Patent Document			Name of Patentee or Applicant of Cited Documents	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶	
		Office ³	Number ⁴	Kind Code ⁵ (if known)					

OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.) date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ⁶
	A4	BLEIL, JEFFREY A. et al., <i>Structure and Function of the Zona Pellucida: Identification and Characterization of the Proteins of the Mouse Oocyte's Zona Pellucida</i> , Dev. Biol. 76: pgs. 185-202, (1980)	
	A5	SALING, PATRICIA, <i>Mammalian Sperm interaction with extracellular matrices of the egg</i> , Oxford Reviews of Reproductive Biology, 11: pgs. 339-388, (1989)	
	A6	SALING, PATRICIA, <i>How the Egg Regulates Sperm Function during Gamete Interaction: Facts and Fantasies</i> , Biology of Reproduction, 44: pgs. 246-251, (1991)	
	A7	KINLOCH, ROSS A. et al, <i>Primary Structure of the mouse sperm receptor polypeptide determined by genomic cloning</i> , Proc. Natl. Sci., 85, pgs. 6409-6413, (1988)	
	A8	BEEBE, STEPHEN J. et al., <i>Recombinant Mouse ZP3 Inhibits Sperm Binding and Induces the Acrosome Reaction</i> , Dev. Biol., 151: pgs. 48-54, (1992)	
	A9	BURKMAN, LANI J., et al. <i>The hemizona assay (HZA): development of a diagnostic test for the binding of human spermatozoa to the human hemizona pellucida to predict fertilization potential</i> , Fertility and Sterility, 49: pgs. 688-693, (1988)	
	A10	OEHNINGER, S. et al., <i>Hermizona assay and its impact on the identification and treatment of human sperm dysfunctions</i> , Andrologia, 24: pgs. 307-321, (1992)	
	A11	CLARK, GARY F. et al., <i>A role for glyconjugates in human development: the human fetto-embryonic defence system hypothesis</i> , Human Reproduction, 11: pgs. 467-473, (1996)	

Examiner Signature	Date Considered
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*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

1 Unique citation designation number. 2See attached Kinds of U.S. Patent Documents. 3Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). 4For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. 5Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. 6Applicant is to place a check mark here if English language Translation is attached.

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Substitute for form 1449B/PTO		Complete if Known		RECEIVED APR 01 2003
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		First Named Inventor	Ke-Wen DONG	
		Group Art Unit	1641	
		Examiner Name	Lisa COOK	
Sheet 2 of 2	Attorney Docket Number	024754-0114	TECH CENTER 1600/2600	

OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.) date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ⁶
	A12	BARBOSA, JAMES A., <i>Site-Directed Mutagenesis of Class I HLA Genes: Role of Glycosylation in Surface Expression and Functional Recognition</i> , J. Exp. Med. 166: pgs. 1329-50 (1987)	
	A13	MANSOUR, SUZANNE L., <i>Disruption of the proto-oncogene int-2 in mouse embryo-derived stem cells: a general strategy for targeting mutations to non-selectable genes</i> , Nature, 336: pgs. 348-349, (1988)	

Examiner Signature		Date Considered	
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⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶Applicant is to place a check mark here if English language Translation is attached.

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